

## ABSTRACT OF THE DISCLOSURE

The present invention relates to compositions comprising analogues of purine nucleosides containing a ring-expanded ("fat") heterocyclic ring, in place of purine, and an unmodified or modified sugar residue, pharmaceutically acceptable derivatives of such compositions, as well as methods of use thereof. In particular, these compositions may be utilized in the treatment of certain cancers, bacterial, fungal, parasitic, and viral infections, including, but not limited to, Acquired Immunodeficiency Syndrome (AIDS), hepatitis, Epstein-Barr and cytomegalovirus.